

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1-87. (Canceled).

88. (Currently Amended) The method according to claim [[87]] 89, wherein the particular element group ~~system~~ is selected on the basis of its geometry in comparison with a geometry in the field of at least one of elements already available for reconfiguration and elements determined to likely be soon available.

89. (Currently Amended) ~~[[The]]~~ A method according to claim 87 for operating a multidimensional field of reconfigurable elements, groups of elements handling data together being configured into the field in a predetermined manner during runtime for processing to perform predetermined tasks, the method comprising:

for at least one task to be performed:

determining, by processing hardware, a plurality of element groups in the multidimensional field that are suitable for performing the task;

selecting, by the processing hardware, a particular one of the plurality of suitable element groups to perform the task; and

configuring, by the processing hardware, the selected element group into the field;

wherein:

configuration data pertaining to element ~~groups~~ ~~group systems~~ is at least one of input from a memory that has non-negligible access times and generated with non-negligible generation times; ~~wherein~~

the selection of the particular element group ~~system~~ is made on the basis of a plurality of characteristic data records, each data record being associated with a corresponding one of the plurality of suitable element ~~groups; group systems, and~~ ~~wherein~~

during the selection of the particular element group ~~system~~, at least for each of some of the plurality of suitable element ~~group systems~~ ~~groups~~, only a characteristic data record that includes less than all configuration data pertaining to the element group ~~system~~ is input; and [[,]]

the method further ~~comprising~~ comprises:

in response to the selection, one of (a) reading from the memory and (b) generating all configuration data pertaining to the selected element group ~~system~~.

90. (Currently Amended) The method according to claim 89, wherein the characteristic data record that includes less than all configuration data pertaining to the element group ~~system~~ pertains to a geometry of the corresponding element group ~~system~~.

91. (Currently Amended) ~~[[The]]~~ A method according to claim 87 for operating a multidimensional field of reconfigurable elements, groups of elements handling data together being configured into the field in a predetermined manner during runtime for processing to perform predetermined tasks, the method comprising:

for at least one task to be performed:

determining, by processing hardware, a plurality of element groups in the multidimensional field that are suitable for performing the task;

selecting, by the processing hardware, a particular one of the plurality of suitable element groups to perform the task; and

configuring, by the processing hardware, the selected element group into the field;

wherein:

during a reconfiguration of the field for ~~processing~~ performing a plurality of tasks to be executed at least to some extent simultaneously, data handling elements are configured as at least two co-existing element ~~group systems~~ groups into the field in a predetermined manner during runtime; and

for the reconfiguration of the field:

a plurality of groupings of co-existing element ~~group systems~~ groups which are suitable for ~~processing~~ performing the plurality of tasks is predetermined;

resources available at least one of at a given point in time and at a given event for the reconfiguration are determined; and

a particular one of the plurality of groupings of co-existing element ~~processing~~ performing by which it is determined that simultaneous processing is possible in a particularly efficient manner is selected.

92. (Currently Amended) The method according to claim [[87]] 89, wherein a first element group system is configured into the field, the method further comprising:

beginning a processing of the task using the first element group system, the processing of the task using the first element group system continuing until a preselected event occurs; and

in response to the preselected event, continuing the processing of the task using a second element group system with at least a partial reconfiguration of the field.

93. (Currently Amended) The method according to claim [[87]] 89, wherein:

the element ~~group-systems~~ groups of the plurality of element ~~group-systems~~ groups differ with regard to a processing speed; and

the selection of the particular element group ~~system~~ is made based on at least determined maximum achievable processing speeds of the plurality of element ~~group-systems~~ groups.

94. (Currently Amended) The method according to claim [[87]] 89, further comprising:

for configuring the selected element group ~~system~~ into the field, determining functions and interconnections of cells of the element group ~~system~~;

wherein:

the determined interconnection allows for a transmission of data from cell to cell in a manner at least largely free of delay; and

for the determination of the interconnection of the cells, cells not situated directly side by side and separated in width by a distance smaller than a length of the cells are considered neighbor cells between which data is transmissible within one of one clock pulse and a low number of clock pulses.

95-138. (Canceled).

139. (New) The method according to claim 91, wherein the particular element group is selected on the basis of its geometry in comparison with a geometry in the field of at least one of elements already available for reconfiguration and elements determined to likely be soon available.

140. (New) The method according to claim 91, wherein:

configuration data pertaining to element groups is at least one of input from a memory that has non-negligible access times and generated with non-negligible generation times;

the selection of the particular element group is made on the basis of a plurality of characteristic data records, each data record being associated with a corresponding one of the plurality of suitable element groups;

during the selection of the particular element group, at least for each of some of the plurality of suitable element groups, only a characteristic data record that includes less than all configuration data pertaining to the element group is input; and

the method further comprises, in response to the selection, one of (a) reading from the memory and (b) generating all configuration data pertaining to the selected element group.

141. (New) The method according to claim 140, wherein the characteristic data record that includes less than all configuration data pertaining to the element group pertains to a geometry of the corresponding element group.

142. (New) The method according to claim 91, wherein a first element group system is configured into the field, further comprising:

beginning a processing of the task using the first element group system, the processing of the task using the first element group system continuing until a preselected event occurs; and

in response to the preselected event, continuing the processing of the task using a second element group system with at least a partial reconfiguration of the field.

143. (New) The method according to claim 91, wherein:

the element groups of the plurality of element groups differ with regard to a processing speed; and

the selection of the particular element group is made based on at least determined maximum achievable processing speeds of the plurality of element groups.

144. (New) The method according to claim 91, further comprising:  
for configuring the selected element group into the field, determining functions and interconnections of cells of the element group;  
wherein:  
the determined interconnection allows for a transmission of data from cell to cell in a manner at least largely free of delay; and  
for the determination of the interconnection of the cells, cells not situated directly side by side and separated in width by a distance smaller than a length of the cells are considered neighbor cells between which data is transmissible within one of one clock pulse and a low number of clock pulses.